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Amendments To The Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of claims:

1. (Presently Amended) An isolated or purified enzyme exhibiting nicotianamine synthase

activity, wherein the enzyme is selected from:

(A) the polypeptide having comprising an amino acid sequence shown in of SEQ ID NO: 1; or

(B) a polypeptide corresponding to SEQ ID NO: 1 in which at least one amino acid has been

replaced by another amino acid residue, at least one amino acid in the sequence of SEQ ID NO: 1

has been deleted, or at least one additional amino acid has been inserted into the sequence of SEQ

ID NO: 1 or amino acid sequence having deletion in a part thereof, being substituted by the other

amino acids or being added with the other amino acids.

2. (Presently Amended) The nicotianamine synthase enzyme according to claim 1, wherein

said enzyme is originated isolated from barley.

3. (Presently Amended) The nicotianamine synthase enzyme according to claim 1-or-2,

comprising having wherein the enzyme has an amino acid sequence shown in SEQ ID NO: 1, 3, 5,

7, 9, 11 or 13.

4. (Presently Amended) The nicotianamine synthase enzyme according to claim 1, wherein

said enzyme is originated isolated from Arabidopsis.

5. (Presently Amended) The nicotianamine synthase enzyme according to claim 1 or 4,

comprising having wherein the enzyme has an amino acid sequence shown in SEQ ID NO: 17, 19

or 21.

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- 6. (Presently Amended) The <u>nicotianamine synthaseenzyme</u> according to claim 1, wherein said enzyme is <u>originated obtained</u> from Oryza sativa.
- 7. (Presently Amended) The nicotianamine synthaseenzyme according to claim 1 or 6, eomprising having wherein the enzyme has an amino acid sequence shown in SEQ ID NO: 15.